

## **MERCURY MARINE**

EXECUTIVE ORDER U-W-001-0023 New Spark-Ignition Marine Engines

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Sections 43013, 43101, 43102 and 43104; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following new spark-ignition marine engine and emission control systems (ECS) produced by the manufacturer are certified as described below. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	FUEL TYPE	DISPLACEMENT (cc)	LEVEL OF CLEANLINESS		
2003	3M9XM.4982G0	Gasoline	498	Ultra Low Emission ("Three Stars")		
EQUIPME	NT APPLICATION	ECS & SPEC	CIAL FEATURES	ENGINE TYPE		
	Dutboard	Engine	Modification	4-Stroke		
ENGINE MODELS (rated power in kilowatts, kW)		See attachment				

The following are the hydrocarbon plus oxides of nitrogen (HC+NOx) exhaust emission standard (Title 13, California Code of Regulations, (13 CCR) Section 2442(b)) and certification emission level in grams per kilowatt-hour (g/kW-hr) for this engine family. Engines in this engine family shall have closed crankcases in conformance with Part I, Section 18(h) of the "California Exhaust Emission Standards and Test Procedures for 2001 Model-Year and Later Spark-Ignition Marine Engines."

	STANDARD (g/kW-hr) (estimated)	CERTIFICATION LEVEL (g/kW-hr)
HC+NOx	19.29	10.85

Compliance with the standard under 13 CCR Section 2442(b) shall be determined based on the sales-weighted average power of the engine family based on engines produced in this family for sale in California. This engine family shall not be used to determine compliance through corporate averaging.

BE IT FURTHER RESOLVED: That for the listed engines, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Sections 2443.1, 2443.2 and 2443.3 (emission control, consumer, and environmental labels), and Sections 2445.1 and 2445.2 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Quarterly reports of engines produced in this engine family for sale in California shall be submitted to the Executive Officer no later than 45 days after the end of each calendar quarter.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this \_\_\_\_\_\_ day of February 2002.

Allen Lyons, Chief

New Vehicle/Engine Programs Branch

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Model Year:2003_		-		
Manufacturer Name:	Mercury Marine			

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Engine Family: \_\_ 3M9XM.4982G0 \_\_\_\_\_\_ SI MARINE ENGINE SUPPLEMENTAL INFORMATION. Revised: E.O.#: <u>U-W-001-0023</u>

S10. MODEL SUMMARY (Use asterisk to identify worst-case engine model used for certification testing)

S11 Model Designation	S12 Engine Code	S13 Sales Codes (Check all appropriate codes)		S14 Eng. Disp. (cc)	S15 Rated Power	S16 Rated Speed	S17 Peak Torque	S18 Peak Torque	
		Calif. Only	49 State	50- State		(kW)	(RPM)	(N-m)	Speed (RPM)
1F25203AD				Х	498	18.65	5000	86.8	4000
1F25213AD				Х	498	18.65	5000	86.8	4000
1F25301AD				х	498	18.65	5000	86.8	4000
1F25302AD				Х	498	18.65	5000	86.8	4000
1F25203AD			45.0	Х	498	18.65	5000	86.8	4000
1F25311AD				Х	498	18.65	5000	86.8	4000
*1F25312AD				Х	498	18.65	5000	86.8	4000
.F25312AN				Х	498	18.65	5000	86.8	4000
1F25412AD				X	498	18.65	5000	86.8	4000
1F25412AN				Х	498	18.65	5000	86.8	4000
7F25203MD				Х	498	18.65	5000	86.8	4000
7F25213MD		,		Х	498	18.65	5000	86.8	4000
7F25302MD				х	498	18.65	5000	86.8	4000
7F25312MD				Х	498	18.65	5000	86.8	4000
7F25412MD				х	498	18.65	5000	86.8	4000